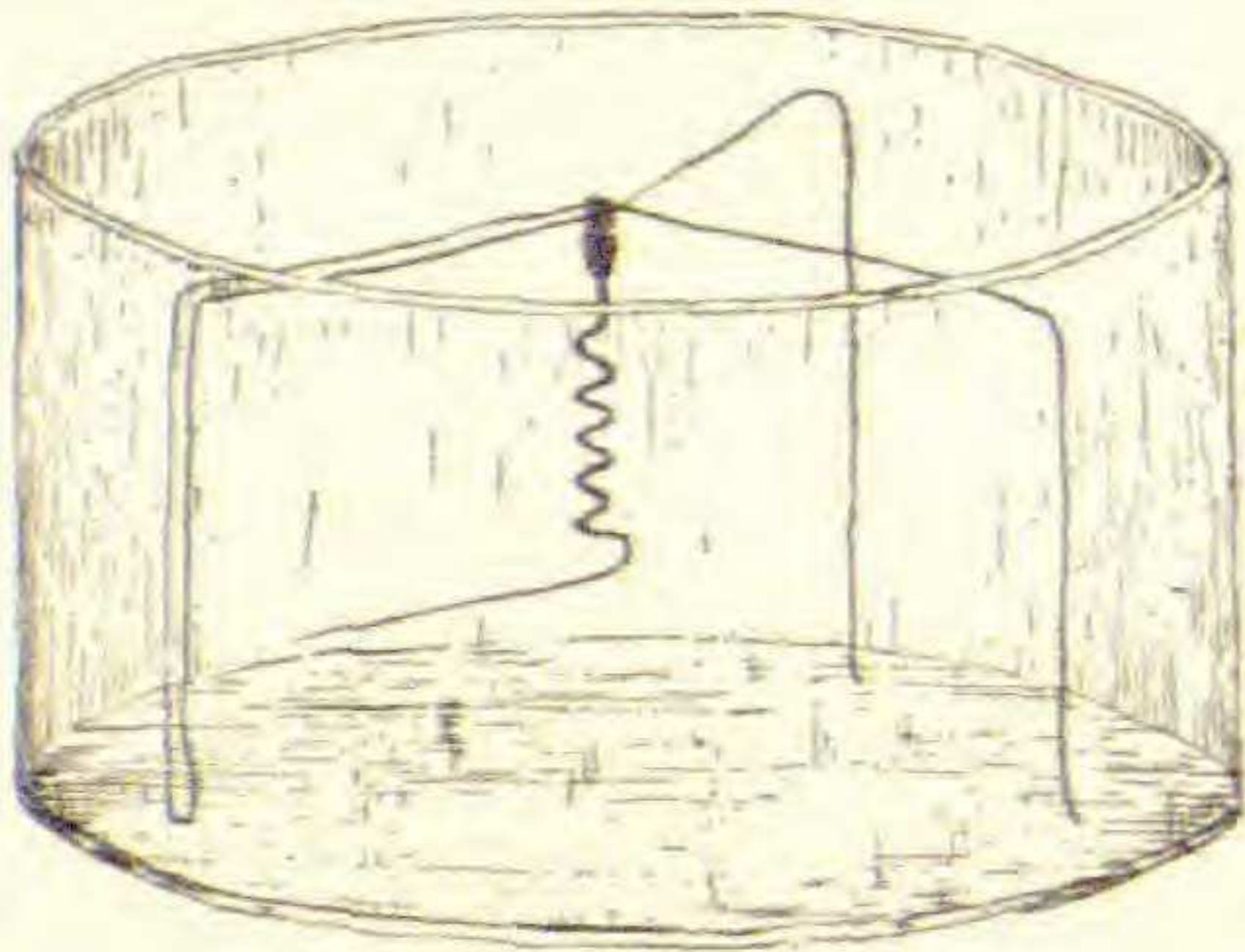


bud scales, whether in threes or twos, we have at least a suggestion that the "sport" was caused by the same influences which continue to affect if not to effect the alternation; namely, on the one hand, the mechanical resistance which the growing papillæ, which develop into leaves or branches, would encounter were they to grow in certain easily recognized directions, and their freedom from this resistance if growing in other directions; or, on the other hand, the disposal of the subjacent conducting-tissues, which would affect the nutrition of the vegetating point, and so might favor the formation and growth of leaf and branch papillæ (*Anlagen*) in positions alternate rather than opposite to older or already developed parts. — GEORGE J. PEIRCE, *Stanford University*.

HYGROMETER MADE WITH ERODIUM AWNS.

[THE following letter, together with some *Erodium* awns, was sent me a short time ago by Mr. Walter R. Shaw. I find upon trial that the awns are admirably fitted for the purpose indicated, and that the construction of an efficient hygrometer with them is a simple operation. Believing that others will be glad to make use of this method of demonstration, I have asked the privilege of publishing the letter and the sketch that accompanied it.—J. C. ARTHUR.]

I have found the awns of *Erodium cicutarium* an excellent substitute for those of *Stipa* in the Darwin transpiration hygrometer. *Erodium* is very common in some parts of California. A piece of iron wire bent in the form of a tripod serves to support the awns in the crystallizing dishes better than the mechanical cross bars that were supplied some time ago. The seed on the awn is easily attached to the tripod by a small bit of wax or paraffin with a hot needle. The tripod has the advantage that it may be instantly revolved to any position inside the dish without throwing the awn out of the axis of the vessel. The *Erodium* awn carries its own pointer. On the whole, less dexterity is required in its manipulation, and it has been shown to be more sensitive to humidity than the longer awns of *Stipa*.—WALTER R. SHAW, *Stanford University*.



Hygrometer made with crystallizing dish, in which an *Erodium* awn is supported on a tripod formed by bending a single piece of iron wire.